PRE-APPEAL BRIEF REQUEST FOR REVIEW (filed with the Notice of Appeal)	Docket Number 048556/274149

Application Number 10/808,166	Filed 03/24/2004

First Named Inventor
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Art Unit 2457	Examiner Blake J. Rubin

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
     Note: No more than five (5) pages may be provided.

Respectfully submitted,

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Date _____ February 26, 2009 _____

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Attachment

REMARKS/ARGUMENTS

These remarks are hereby filed concurrent with a Pre-Appeal Brief Request for Review, and following a final Official Action of October 30, 2008. The final Official Action continues to reject all of the pending claims, namely Claims 1-97, under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0013904 to Gardner. As explained below, Applicant respectfully submits that the claimed invention is patentably distinct from Gardner. In view of the remarks presented herein, Applicant respectfully requests reconsideration and withdrawal of the rejections of all of the pending claims.

According to one aspect of the claimed invention, as reflected by independent Claim 1, an apparatus is provided that includes a processor configured to send, to a client, a set of a plurality of labels identifying a respective plurality of elements of an authentication matrix. As recited, the authentication matrix includes a plurality of elements organized in one or more columns and rows each of which includes a respective header, each element being identifiable by a label including a column header and row header that identifies the respective column and row of the element. As also recited, the set of labels including the column headers and row headers of the respective labels is unknown at the client until the set of labels is sent thereto. The processor is configured to receive a passcode from the client formulated based upon the elements identified by the set of labels, and configured to authenticate the client based upon the formulated passcode.

As stated in the MPEP, anticipation of the claimed invention requires the cited reference to explicitly or inherently teach each and every element of the claimed invention. MPEP § 2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). In contrast to independent Claim 1, Gardner does not expressly or inherently teach an apparatus for authenticating a client in which a set of labels including column/row headers identifying columns/rows of a matrix including elements from which a passcode is formulated are unknown at the client until that set is sent to the client. As previously explained, Gardner discloses a method of remote authentication for secure system access and payment systems, in which the method makes use of a variable PIN (VPIN) which may vary across different occasions of use. As disclosed, the VPIN (alleged passcode) may be derived from numbers or letters (alleged elements) that may be randomly generated and held in a matrix or

grid (alleged authentication matrix) available to the user, where those numbers/letters may be identified by grid references (alleged labels). In every embodiment of Gardner, however, the user knows upfront the grid references identifying the numbers/letters from which the VPIN is derived. In fact, Gardner explicitly discloses that "these grid references may relate to such things as the Weekday, the Date, the Month, the Use number for that day, the Time of day to the last complete hour, or indeed any other method of <u>precisely indicating which grid reference applies to a particular and specific use</u>." Gardner, paragraph [0033] (emphasis added). The set labels <u>including column/row headers</u> of the matrix from which the passcode of independent Claim 1 is derived, on the other hand, are unknown at the client until sent thereto.

Gardner discloses two primary manners of authentication based on a VPIN derived from a grid, namely a non-interactive manner and an interactive manner, again, both of which include the user knowing upfront the grid references (alleged labels) identifying the numbers/letters from which a VPIN is derived. Indeed, the fact that the user knows upfront the grid references enables the non-interactive manner of authenticating that user. In the interactive manner of authentication, Gardner may disclose particular numbers/letters identified by grid references and their order within a derived VPIN being unknown to the user until their selection by a master system. But even in this embodiment, the user still knows the grid references (alleged labels) from which those numbers/letters are selected. The client of independent Claim 1, on the other hand, does not know the set of labels <u>including the column/row headers of the respective labels</u> (the elements of which a passcode is formulated) ahead of being sent that set of labels. And at least due to the fact that the user knows upfront the grid references enables the non-interactive manner of authenticating that user, Applicant respectfully submits that there is no apparent reason to modify Gardner to include this feature.

Applicant notes that the Examiner has proffered a "nested matrix" interpretation of Gardner in which each cell of Gardner's grid is a "nested matrix" or "nested grid" including a single row and a number of "nested columns" corresponding to the number of numbers/letters in the respective cells. According to this interpretation, for the grid shown in FIG. 3, each cell includes a single row and three nested columns – one nested column for each of the three numbers (e.g., "489") in the respective cell. As explained by the Examiner, then, in the interactive manner of authentication, the system may prompt the user for some but not all of the numbers/letters of a known cell; and as such, although a cell may be known to the user, the

particular digits from the cell – and thus the corresponding nested columns – that are used to derive a VPIN may be unknown. That is, although a cell including the numbers "489" may be known to the user, the system may only prompt the user for the third digit (i.e., "9") and that this prompting, as opposed to prompting for all three digits or any of the other digits, is unknown to the user beforehand.

However, even in the "nested matrix" interpretation of Gardner, the user does know the row (or row label) of the matrix before being prompted for the VPIN. According to independent Claim 1, on the other hand, matrix labels <u>including both column and row headers</u> are unknown before the client receives those labels. As in the non-interactive embodiment, in the interactive embodiment of Gardner, the cell of Gardner's matrix is known to the user as it is pinpointed, for example, by the current date or time. Even given an unknown "nested column header" interpretation of Gardner as suggested, Gardner does not also have an unknown "nested row label." The claimed invention, which does not base cell selection on information known to the user outside of the authentication scheme, recites that labels <u>including both column and row headers</u> are unknown before their receipt by the user.

Applicant notes that the aforementioned remarks as to the "nested matrix" interpretation were presented to the Examiner by Applicant's representative during a telephone interview with the Examiner on January 15, 2009. In response, the Examiner suggested that Gardner could be interpreted such that each section of time on Gardner's matrix could be interpreted as a separate row. According to this interpretation, with respect to FIG. 4, Gardner's matrix includes a separate row for the weekday, date, month and time; each section of time corresponding to a separate row. And under this interpretation, the Examiner further suggested that in the interactive manner of authentication, the system may prompt the user for letters/numbers from some but not all of the sections of time (i.e., rows). Thus as argued by the Examiner, although the sections of time may be known to the user, the sections – and thus the corresponding rows – that are used to derive a VPIN may be unknown. That is, although the particular row for each of the weekday, date, month and time may be known to the user, the system may only prompt the user for digits from the weekday and month sections (rows) and that this prompting, as opposed to prompting for digits from all of the sections (and hence rows) or any of the other sections, is unknown to the user beforehand.

Contrary to the aforementioned, Applicant respectfully submits that <u>Gardner does not explicitly disclose that a user may be prompted for digits for some sections of time but not others, and that the sections from which the user is prompted for digits are unknown to the user before being received</u>, similar to independent Claim 1 reciting that matrix labels <u>including both column and row headers</u> are unknown before being received. More particularly, Gardner does not explicitly disclose a user having a VPIN code card having multiple sections for different measures of time, but is prompted for digits from some but not all of those sections. In all disclosed embodiments of Gardner implementing the interactive manner of authentication, the user is prompted for digits from all of the sections of time present on its VPIN code card.

Not only does Gardner not explicitly disclose the aforementioned feature, but Gardner also does not inherently disclose the feature of independent Claim 1. Applicant notes that to establish inherency, evidence must make clear that the missing descriptive matter is necessarily present in the prior art, and would be recognized as being present in the prior art by those skilled in the art. *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (*citing Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing <u>may result</u> from a given set of circumstances is not sufficient." *Id.* (*citing Continental Can Co.*, 948 F.2d at 1269) (emphasis added). In the instant case, Gardner does not <u>necessarily</u>, if not explicitly, disclose the aforementioned feature of independent Claim 1.

Applicant acknowledges that Gardner illustrates a time section in its VPIN code card of FIG. 4 and that in its disclosed example 2 relative to that code card, Gardner does not disclose its user being prompted for a digit from that section. But as expressly disclosed by Gardner, "time of authentication is featured on the VPIN Code Card in FIG. 4 but not further illustrated." Gardner, paragraph [0069]. Thus, even given the lack of explicit disclosure of the user not being prompted for digits from a time section of a VPIN code card, Gardner does not <u>necessarily (inherently) disclose that the sections (rows) from the card from which the user is being prompted for digits are unknown to the user until being prompted</u>, similar to the matrix labels of independent Claim 1.

Applicant therefore respectfully submits that independent Claim 1, and by dependency Claims 2-8, 60 and 61, is patentably distinct from Gardner. Independent Claims 9, 17, 25, 33, 42, 51, 74, 82 and 90 include subject matter similar to that of independent Claim 1, including a

set of labels including columns/rows of a matrix including elements from which a passcode is formulated are unknown at the client until that set is sent to or received by the client. Thus, Applicant also respectfully submits that independent Claims 9, 17, 25, 33, 42, 51, 74, 82 and 90, and by dependency Claims 10-16, 18-24, 26-32, 34-41, 43-50, 52-59, 62-73, 75-81, 83-89 and 91-97, are also patentably distinct from **Gardner,** for at least the reasons given above with respect to independent Claim 1.